

NOVELTIES IN AMERICAN EUPHORBIACEAE

LEON CROIZAT

MATERIAL recently received from various sources in North and South America renders it desirable to publish the data included in this paper. Unless otherwise stated, the types of the new species are deposited in the herbarium of the Arnold Arboretum of Harvard University.

Acalypha Linnaeus

Acalypha plicata Muell.-Arg. in DC. Prodr. 15(2): 855. 1866; Pax & Hoffm. in Pflanzenr. 85(IV. 147): 124. 1924.

Acalypha cordifolia Griseb. in Abhandl. Gesellsch. Wiss. Göttingen 19: 60. 1874; op. cit. 24: 59. 1879. Non Hook. 1847.

Acalypha flabellifera Rusby in Mem. Torrey Bot. Club 6: 119. 1890; Pax & Hoffm. in Pflanzenr. 85 (IV. 147): 121. 1924; Lourteig & O'Donnell in Gen. Sp. Pl. Argent. 1: 216, pl. 90. 1943. Syn. Nov.

In determining *Vargas 1713*, Peru: Depto. Cuzco, I could only conclude that Hoffmann's suggestion that *A. plicata* Muell.-Arg., "Cum *A. flabellifera* comparanda est et verisimiliter eadem," was correct, and accordingly effect the reduction of Rusby's species. It is impossible to separate *Steinbach 8608*, Bolivia: Cochabamba, from the holotype of *Mueller-Argoviensis*, a photograph of the latter being available. The vigorous juvenile state represented by *Vargas 1713* is likewise fully matched by *Rojas 9221*, Paraguay: Asunción, which indicates that the species extends from Paraguay, northwestern Argentina, and eastern Bolivia to southeastern Peru, this being a normal distribution. *Acalypha lagoensis* Muell.-Arg., a closely related form, is endemic to eastern Brazil, and may be connected with *A. plicata* Muell.-Arg. by intermediates.

In the affinity of *A. plicata* Muell.-Arg. are the northern Peruvian *A. fulva* I. M. Johnst. and *A. cuspidata* Jacq., the latter endemic to the West Indies, Venezuela, Colombia and Ecuador. *Acalypha Sanctae-Martae* Pax & Hoffm. (1924), is identical with the earlier *A. asterifolia* Rusby (1920) from the Atlantic coast of Colombia, but is uncomfortably close to *A. cuspidata* Jacq. The limits of these forms and their inter-relationships are as yet obscure.

Euphorbia Linnaeus

Euphorbia apurimacensis sp. nov.

Arbor parva ad 3-5 m. alta, innovationibus ad lentem puberulis, cicatricosis, cortice pallide brunneo subaurantiaco. Foliis tenuibus ellipticis apice breviter mucronato-acuminatis, basi sensim angustatis in petiolum breve. 5 mm. longum vel minus productis, lamina glabra 3-7 cm. longa, 1-1.5 cm. lata, margine integerrimo ciliolato, venis patentibus gracillimis obscuris. Cyathiiis singulis, pedunculo ca. 5 mm. longo fultis,

bracteolis deciduis subtriangularibus ad 4-5 mm. longis, involucre ipso ad lentem puberulo ca. 3 mm. longo, 5 mm. fauce lato, glandulis integris, habitu erectis. Caetera desunt.

PERU: Apurimac: Prov. Abancaí, Quebrada de Matara 2000-2800 m., "Xerophytic slopes," Vargas 2290.

The nearest ally of this new species is the Ecuadorean and southern Colombian *E. Latzii* H.B.K., from which *E. apurimacensis* is immediately distinguishable because of its very short-petioled leaves, and short peduncled cyathia, the latter being barely half as large as are those of Kunth's species.

Euphorbia refugii sp. nov.

Perennis videtur, cauliculis annuis erectis spithameis totis albo-villosis, radice albicante donatis. Foliis aequa ratione ac caule pubescentibus, infimis alternis paucis, caeterum ad dichotomias oppositis, ovato-rotundatis ad 1 cm. longis, totidemque latis vel minoribus, irregulariter penninerviis, venis utrinque 3-4, petiolulo ca. 1-2 mm. longo, margine subintegrus obscureve repandis, stipulis haud obviis. Foliis floralibus vegetativis sub-similibus, minoribus. Cyathio hispido-villoso ca. 1.5 mm. longo latoque, glandulis 4 appendiculatis, appendicibus integris conspicuis, sordide luteis fabrica vix petaloideis, lobis minimis laceratis subtriangularibus, floribus ♂ paucis ad 5, flore ♀ conferte lanoso, stylis 3, quove ad basim partito, semine ovoideo ca. 0.75 mm. longo, testa laete brunnea, grosse foveolato-punctata, arillo pallido, caruncula minima.

TEXAS: Aransas Co., Aransas Refuge, Cory (Tex. Agr. Exp. Sta.) 49014.

I am much indebted to Dr. Rogers McVaugh of the United States Department of Agriculture for the transmission of this remarkable novelty. Its seed and habit suggest a species of the Subg. *Tithymalus* Boiss. in the vicinity of *E. commutata* Engelm. or *E. peploidion* Engelm., but this impression is immediately dissipated by the pubescence, and the conspicuous, though not truly petaloid appendages to the glands. The cyathium tends to be slightly zygomorphic, the gynophore protruding through a gap in the involucre, which gap appears to take the place of a missing gland. The ♂ flowers are few, and regularly arranged at the base of the gynophore.

This new species apparently belongs in the Sect. *Ipeccacuhna* Boiss., but its closest affinities are not yet clear.

Chamaesyce S. F. Gray emend. Croizat

Chamaesyce truncapata sp. nov.

Repens, caudice ligneo sat robusto descendente, cauliculos plures saepissime habitu rosulatos edente basi lignosos duros, caeterum herbaceos, internodiis pollicaribus vel brevioribus, totis molliter griseo-lanulosis. Foliis basalibus rotundatis subintegrus ca. 3 mm. magnis, caeterum obvie anisophyllis rotundato-triangularibus ad 1 cm. longis, 0.5 mm. latis, margine more *C. hirtae* serratis, utraque facie griseo vel albo-lanulosis, petiolulo quam 1 mm. brevior, stipulis interpetiolaribus acutis subintegrus, indumenti copia haud obviis. Cyathiis solitariis, ca. 2 mm. longis, 1.5 mm. latis, glandulis 5 plicatis appendice minima integra pallide rosea vel albidia, lobis

triangularibus plus minusve inciso-sectis, involucro ad lobos viridulo, ad glandulas pallido, ovario pedicellato hispido-lanoso, stylis brevibus bifidis.

PERU: Apurimac-Cuzco boundary, Curahuasi, Trancapata, 2800 m., "Stony slopes," Vargas 1257 (TYPE in herb. Univ. Cuzco, fragment in herb. Arnold Arboretum).

This species is certainly not the same as *Chamaesyce boliviana* (Rusby) Croiz. comb. nov. (*Euphorbia boliviana* Rusby in Bull. New York Bot. Gard. 4: 442. 1907) which its author erroneously assimilates to *C. serpens* (H.B.K.) Small by referring Mandon 1064 to it. *Chamaesyce trancapatae* lacks outstanding diagnostic characters, but young vigorous shoots are nevertheless easily identified on account of their heavy whitish or grayish pubescence, the leaf shape suggesting that of small forms of *C. hirta* (L.) Millsp.

ARNOLD ARBORETUM,
HARVARD UNIVERSITY.